

LONG TERM PAVEMENT PERFORMANCE PROGRAM DIRECTIVE

For The Technical Direction Of The LTPP Program

Program Area: Monitoring

Directive Number: FWD-10

Supersedes: Parts A and B of LTPP Directive FWD-3 Date: September 1, 1994

Subject: Deflection Monitoring Frequency and Priorities

This directive documents the nominal deflection testing frequency for all Long-Term Pavement Performance (LTPP) test sections and the priorities to be considered when all required deflection testing cannot be completed.

A. Testing Frequency

1. The nominal frequency for routine deflection monitoring of LTPP test sections shall be as follows. Where a given test section is included in more than one of the categories outlined, the maximum testing frequency applies.

LTPP Experiment/Program	Nominal Testing Frequency	Remarks
GPS	Every 5 years	Approximately 1/5 of all test sections to be tested in any one year.
SPS	Biannual	See 2, 3 and 4 below
Seasonal Monitoring - sites which freeze	14 times/year every other year	Twice per month during thaw period, monthly otherwise.
Seasonal Monitoring - sites which do not freeze	12 times/year every other year	Monthly

2. Pre-, during-, and post construction testing for SPS projects are to be conducted in accordance with the applicable guidelines provided in the Manual for FWD Testing in the Long Term Pavement Performance Study, Operational Guidelines Version 2.0 (February 1993).

3. Testing of Sections 2, 4, 8, and 10 in SPS-1 projects and Sections 1, 5, 8, and 12 in SPS-2 projects (hereafter referred to as "weak" sections) is to be conducted every 6 months. Where this is not feasible, testing intervals up to once per year will suffice.

4. Deflection testing on base and subgrade layers for SPS-1, -2, and -8 is to be conducted in accordance with Directive S-4.

5. Pre-construction or terminal testing is to be conducted on any section which is to be modified (overlaid, reconstructed, etc.), whether it will continue as an LTPP test section or not. Where feasible, this testing should be conducted not more than three months prior to construction. Where this is not feasible, testing up to 6 months prior to actual construction will suffice.

B. Priorities

Where resource limitations prohibit completion of all planned deflection testing, the following order of precedence shall be followed in setting priorities.

Priority Level	Type of Testing	Remarks
1	Maintenance of linkage with drilling and sampling	Where applicable,
1	Pre-, and during-construction testing for SPS-5, -6 and -7 experiments	
1	Post-construction testing for SPS experiments	Testing may be postponed if absolutely necessary, but must be completed within 6 months of the specified time.
1	Pre-rehabilitation testing for SPS-3 and -4 experiments	
1	Seasonal monitoring of sites which have been instrumented	Testing of seasonal monitoring sites which have not been instrumented is not required.
1	Pre-construction or terminal testing for any section (GPS or SPS) which is to be modified	
2	Testing of "weak" SPS-1 or -2 sections	Testing may be postponed if absolutely necessary, but must be completed within 6 months of the specified time.
2	P-59 testing during SPS-1, -2 and -8 construction	Testing may be omitted if infeasible or impractical due to logistics or lack of equipment.
2	Long term monitoring of GPS and SPS sites	Testing may be postponed up to 1 year.

Approval

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